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10/588,375

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Aurelio Romeo

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EXAMINER

GWARTNEY, ELIZABETH A

ART UNIT

PAPER NUMBER

1781

NOTIFICATION DATE

DELIVERY MODE

11/15/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/588,375	Applicant(s) ROMEO, AURELIO	
	Examiner ELIZABETH GWARTNEY	Art Unit 1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 11-13, 15-33, 35-39, 41 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 11-13, 15-33, 35-39, 41 and 42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The Amendment filed 30 August 2010 has been entered. Claims 34 and 40 have been cancelled. Claims 41 and 42 have been added. Claims 1-3, 11-13, 15-33, 35-39 and 41-42 are pending.

2. The previous claim objections, 112 2nd Paragraph and 101 rejections have been withdrawn in light of applicant's amendments made 30 August 2010.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1-3, 5-10, 35 and 37 are rejected under 35 U.S.C. 102(a) as being anticipated by de la Cuadra (US 2003/0224100).

Regarding claims 1-3 and 5, de la Cuadra et al. disclose a tomato composition made by subjecting tomatoes to a hot break process, separating the resulting product into two streams: one comprising mainly soluble tomato solids or the “thin stream” and one comprising mainly insoluble solids or the “thick stream,” concentrating the “thin stream” or serum to yield approximately 30° Brix, and adding the concentrated serum back to the “thick stream” or pulp to obtain a tomato composition with a ratio of soluble tomato solids to insoluble tomato solids of between 1.0:0.7, 1.0:0.8 or 1.0:1.5 ([0034]-[0036], [0045]/Examples 1-2 and 5). de la Cuadra et al. disclose a tomato composition, having about 11% to 17.5% water (i.e. wherein the

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concentrated serum is 30° Brix and the pulp comprises 7% water) and about 82.5% to 89% dry residue wherein the dry residue has a ratio of soluble tomato solids to insoluble tomato solids of between 1.0:0.7, 1.0:0.8 or 1.0:1.5 ([0034]-[0036], [0045]/Examples 1-2 and 5).

Regarding claims 6-10, 35 and 37, de la Cuadra et al. disclose all of the claim limitations as set forth above. de la Cuadra et al. also disclose tomato products, i.e. tomato-based spread, ketchup, sweet tomato sauce and tomato mousse, comprising the tomato composition of claim 1 and 2-50% of one or more components selected from the group consisting of vegetable oil, aroma or flavoring compounds, onion, shallot, garlic, bell peppers, sweet bell peppers, chili peppers, courgette, egg plant, beet root, carrot, spinach, broccoli, tomato dices or chunks, fruit juices, fruit pastes, fruit particles, honey, herbs, spices, sugar, nuts, seeds, cheese, cream, butter (water in oil emulsion), egg white, egg yolk, starch and gums ([0029], [0045]/Example 1-2 and 5/Table 1).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 11-13 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Cuadra et al. (US 2003/0224100).

Regarding claims 11-12, de la Cuadra disclose all of the claim limitations as set forth above. Given de la Cuadra et al. disclose cheese broadly ([0029]), since soft-grain and grated hard-grain cheeses are well known ingredients used in food preparation, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used any cheese, including soft-grain and grated hard-grain cheese, with the tomato composition of de la Cuadra et al., and arrive at the present invention.

Regarding claim 13, de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that de la Cuadra et al. disclose an oil-in-water type composition, i.e. tomato mousse, since the tomato solids comprise about 23% of the composition, it is clear that the amount of oil-in-water emulsion must comprise the balance of the composition, i.e. about 77%.

Regarding claims 28-29, de la Cuadra et al. disclose all of the claim limitations as set forth above. Given de la Cuadra et al. disclose sauces and condiments including ketchup and sweet tomato sauce ([0045]/Examples 2-3), since sauces and condiments are known to be mixed with foods, it would have been obvious to one of ordinary skill in the art at the time of the invention to have mixed the tomato composition of modified de la Cuadra et al. with a food (e.g. pasta, meat for meatloaf) to produce a desired food dish or flavor.

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8. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over de la Cuadra et al. (US 2003/0224100) in view of Gourmet ("Lowcountry Aioli").

Regarding claim 36, de la Cuadra et al. disclose all of the claim limitations as set forth above. While de la Cuadra et al. disclose various tomato products made by adding an ingredient or mixture of ingredients to a tomato composition ([0027], [0045]/Table 1/Examples 1-2 and 5), the reference does not explicitly disclose adding mayonnaise to a tomato composition.

Gourmet teaches that it was known to combine mayonnaise with a tomato composition to produce an aioli product. Given that mayonnaise was known to be used in combination with a tomato composition, it would have been obvious to one of ordinary skill in the art to have combined the tomato composition of de la Cuadra et al. with mayonnaise to make an aioli product.

9. Claims 15-27, 30-33, and 39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Cuadra et al. (US 2003/0224100) in view of Succar et al. (WO 03/024243).

Regarding claims 15-16, 18, 20-21, 23, 30-33, 39, 40 and 42, de la Cuadra et al. disclose all of the claim limitations as set forth above. Further, de la Cuadra et al. disclose a process for making tomato-based products comprising the following steps: (a) subjecting tomatoes to a hot break process; (b) separating the resulting product into two streams by mechanical separation (i.e. solid-liquid separation apparatus): one comprising mainly soluble tomato solids, i.e. serum, and one comprising mainly insoluble solids, i.e. pulp, (c) concentrating the separated serum to 30° Brix; and (d) recombining the recovered pulp and concentrated serum streams to obtain

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tomato-based product with a ratio of soluble tomato solids to insoluble tomato solids of between .0:0.7, 1.0:0.8 or 1.0:1.5 and a water content of lower than 80% and greater than 15% (see [0045]/Examples 1-5, [0034]-[0036]). Specifically, de la Cuadra et al. disclose a tomato composition, having about 11% to 17.5% water (i.e. wherein the concentrated serum is 30° Brix and the pulp comprises 7% water) and about 82.5% to 89% dry residue ([0034]-[0036], [0045]/Examples 1-2 and 5).

While de la Cuadra et al. disclose concentrating the serum stream, the reference does not disclose concentrating the recovered pulp or pulp stream. Further, while de la Cuadra et al. disclose that the thin and thick streams are separated by mechanical separation ([0035]), the reference does not explicitly disclose that the starting tomato base is maintained under a slow stirring.

Succar et al. teach a process for making tomato paste comprising processing tomatoes into tomato juice, subjecting the juice to a decanter that separates the juice into two portions (i.e. serum and pulp), concentrating the serum and pulp portions, and recombining the serum and cake portions to produce a tomato paste having improved color, texture, flavor, and nutrition (Abstract). Succar et al. also teach that the tomato material, i.e. juice, is provided to the decanter, the decanter and internal cake scraping auger are rotated (i.e. stirring the tomato juice), and the cake portion is separated from the serum portion (p.9/L11-17, Figure 4). Succar et al. teach that the scraping auger (i.e. centrally placed stirrer, shape of a helix) has a scroll speed differential of 20-40 rpm (p.9/L30-35). Succar et al. also teach that the decanter comprises a cylindrical vessel with openings (*see* Figure 4/Appeture-431).

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de la Cuadra et al. and Succar et al. are combinable because they are concerned with the same field of endeavor, namely, processes to make tomato-based products comprising: hot or cold breaking tomatoes, separating the resulting product into two streams: one of serum and one of pulp, concentrating the serum stream, and recombining the two streams. Given that Succar et al. disclose separating tomatoes into serum and pulp portions by mechanical separation, since Succar et al. disclose that it was known to use a decanter to separate the serum and pulp fractions of tomatoes, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a decanter that rotates (i.e. stirs) the tomato material during separation, as taught by Succar et al., in the process of de la Cuadra et al. because doing so would amount to nothing more than the use of a known mechanical separating device for its intended use in a known environment to accomplish entirely expected results.

Given de la Cuadra et al. disclose that the thick and thin stream are recombined in specific ratios to produce products with different consistencies ([0027]), since Succar et al. teach combining concentrated pulp (i.e. thick stream) with concentrated serum (i.e. concentrated thin stream) to make a thick tomato paste product, it would have been obvious to one of ordinary skill in the art at the time of the invention to have concentrated the thick stream of de la Cuadra et al. to recombine with concentrated thin stream for the purpose of making a thick tomato paste product.

Regarding claim 17, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that de la Cuadra et al. do not explicitly disclose a temperature in which the separation process is carried out, it can be assumed that the process is carried out at ambient temperature, i.e. room temperature (i.e. about 20°C).

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Regarding claim 19, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter that rotates, the reference does not explicitly disclose that it rotates at a speed from 1 rpm to 20 rpm. Succar et al. teach that separation can be adjusted by varying the rotation speed of the decanter (p.9/L30-32). As separation efficiency is a variable that can be modified, among others, by adjusting the rotation speed of the decanter, the precise rotation speed would have been considered a result effective variable by one of ordinary skill in the art at the time of the invention. As such, without showing unexpected results, the claimed rotation speed cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the rotation speed of the separation decanter of modified de la Cuadra et al. to obtain the desired separation (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

Regarding claims 22 and 27, modified de al Cuadra et al. disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter having walls with openings (see Figure 4/Aperture-431), the reference does not disclose that the width of the openings is not greater than 0.1 mm or higher than 0.1 but not higher than 0.5 mm. As serum purity is a variable that can be modified, among others, by adjusting the aperture in the decanter, the precise opening width would have been considered a result effective variably by one of ordinary skill in the art at the time of the invention. As such, without showing unexpected results, the claimed opening width cannot be considered critical. Accordingly, one of ordinary skill in the art at the time the invention was made would have optimized, by routine experimentation, the aperture opening

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width in the decanter of modified de la Cuadra et al. to obtain the desired serum purity (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), since it has been held that where the general conditions of the claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. (*In re Aller*, 105 USPQ 223).

While de al Cuadra et al. disclose the use of tomatoes, the reference does not explicitly disclose the maturity of the fruit. However, given de al Cuadra et al. disclose tomatoes, it is clear that the tomatoes would be ripened to some extent, i.e. partially.

Regarding claim 24, modified de la Cuadra et al disclose all of the claim limitations as set forth above. While Succar et al. teach a decanter in the shape of a cylinder positioned horizontally (see Figure 4), the reference does not explicitly teach the size of the cylinder (i.e. diameter and length). Since the instant specification is silent to unexpected results, it would have been obvious to one of ordinary skill in the art to change dimensions of the decanter, since such a modification would have involved a mere change in the size (or dimension) of a component. A change in size (dimension) is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device, and the device having the claimed dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

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Regarding claim 25, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Given that Succar et al. teach a decanter to process tomatoes, it is clear that the decanter would intrinsically be of metal material.

Regarding claim 26, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Further, Succar et al. teach sterilizing the fractionated serum and pulp fractions (p.7/L24-26). The ordinarily-skilled artisan would understand that sterilization helps extend product shelf life by inhibiting the growth of unwanted bacteria, yeasts and molds.

de la Cuadra et al. and Succar et al. are combinable because they are concerned with the same field of endeavor, namely, processes to make tomato-based products comprising: hot or cold breaking tomatoes, separating the resulting product into two streams: one of serum and one of pulp, concentrating the serum stream, and recombining the two streams. It would have been obvious to one of ordinary skill in the art to have sterilized the fractionated serum and pulp fractions in the process of modified de la Cuadra et al. for the purpose of extending the shelf-life of the resulting product.

Regarding claim 41, modified de la Cuadra et al. disclose all of the claim limitations as set forth above. Given de la Cuadra et al teach a process for preparing a tomato product wherein the tomato product is tomatoes, the limitations of claim 41 are satisfied.

Response to Arguments

10. Applicant's arguments filed 30 August 2010 have been fully considered but they are not persuasive.

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Applicants assert that Examiner's calculation for both the water content and dry residue of the thin stream + thick stream, of Examples 1, 2 and 5 of the reference, have been made based on the assumption that the thin stream of the reference is made of soluble solids (30° Brix) and water only, and the thick stream of insoluble solids and water only. However, Applicants submit that "there is no basis presented for concluding that the thick stream in de la Cuadra et al. is substantially all of the insoluble solids and the thin stream is substantially all of the soluble solids. Applicants attempt to show that if the thin stream comprised substantially of the insoluble solids and the thin stream comprised substantially all of the soluble solids, then the ratio of thin stream (dry weight) and thick stream (dry weight) should be proportional to the ratio of soluble tomato solids to insoluble tomato solids.

In this case, de la Cuadra et al. disclose tomato composition wherein the ratio of soluble tomato solids to insoluble tomato solids ranges from 1.0:0.1 to 1.0:1.5. Therefore de la Cuadra et al. disclose a tomato composition comprising from about 40% to about 60% soluble solids and from about 40% to about 60% to insoluble solids. Given there are no other solids in the tomato besides soluble and insoluble and de la Cuadra disclose compositions comprising 82.5 to 89% dry residue or total solids, since de la Cuadra et al. disclose a thin stream comprising mainly soluble solids and about 70% water (i.e. 30° Brix) and a thick stream comprising mainly insoluble solids and about 7% water, the ratio of soluble to insoluble solids remains constant.

With regards to Succar et al., Applicants assert that it is clear that in the process of claim 15 a decanter is not used for the separation nor is a decanter suitable for the separation step. Applicants note that the specification describes that in the inventive method the solid liquid separator is equipped with a stirrer, or the solid liquid separator can rotate at an angular speed of

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1-10 rpm. Thus, Applicants argue, the solid-liquid separator of the present invention is not the same as or similar to a decanter.

In this case, Succar et al. teach using a decanter to *separate* tomato juice into two portions (i.e. serum and pulp). Further, while Succar et al. does not teach that the decanter rotates at a speed of from 1 rpm to 20 rpm, Succar et al. teach that the separation can be adjusted by varying the rotation speed of the decanter (p.9/L30-32). Therefore given it was known to adjust separation efficiency by varying the rotation speed of a decanter, one of ordinary skill in the art would have found it obvious to adjust, by routine processing, the rotation speed.

Applicants assert that de la Cuadra et al. and Succar et al. teach away from the process of the present invention because Succar et al. teach that separation efficiency improves by increasing the temperature and the lower end of the temperature range is more than twice that of the temperature recited in claim 15.

However, note that while Succar et al. does not disclose *all* the features of the present claimed invention, Succar et al. is used as teaching reference, and therefore, it is not necessary for this secondary reference to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather this reference teaches a certain concept, namely separating tomato serum and pulp with a decanter and in combination with the primary reference, discloses the presently claimed invention.

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Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH GWARTNEY whose telephone number is (571)270-3874. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. G./

Examiner, Art Unit 1781

/Keith D. Hendricks/

Supervisory Patent Examiner, Art Unit 1781